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ABSTRACT
Present study aims to explore the ethnobotanical information on medicinal plants used by meager community of Uraon of Surguja district Chhattisgarh India. The study was carried out during different periods of the year 2009-2011. Information’s on plant and plant parts uses were collected interviewing key informants by using semi-structured questionnaire. Altogether 17 different plant species belonging to 14 families were documented and majority of them are tree. In terms of plant parts use, leaf and stem/bark are in top priorities. These plants are used to treat diarrhea.

Keywords: Ethnobotany, Diarrhea, Medicinal plants, Uraon tribe.

1. Introduction
Diarrhea is a major public health problem in developing countries and is said to be endemic in many regions of Asia and is the leading cause of high degree of morbidity and mortality which contributes to the death of 3.3 to 6 million children annually. Multiple drug resistance among Enteropathogens in various geographic regions presents a major threat in the control of diarrhea. Therefore indigenous medicinal plants as an alternative to antibiotic are said to play a significant role here. This particular aspect of using medicinal plants as a remedy or home cure for diarrhea is applied in our study. In the present study, we chose some plants currently used in the folk medicine in our region, rural place in Surguja district, a rich fauna and a good source of medicinal plants. All of these plants selected for the study have been used as traditional folklore medicine for the treatment of dysentery and diarrheal diseases in this region Surguja district which lies in the northern part of Chhattisgarh state is biodiversity rich area, dominated by tribal communities. Borders of Uttar Pradesh, Jharkhand, Orissa, and Madhya Pradesh states are adjoining to the district. The district has over extension between southeastern parts of Vindhyachal-Baghelkhand region of peninsular India. Surguja lies between 230 37'25" to 240 6'17" north latitude and 810 34"40" to 840 4"40" east longitude. The land area of Surguja is 16359 sq Km. the major tribes of Surguja region are the major tribes of Surguja region are Nagesiya, Baiga, Kanwar, Panika, Korwa and Uraon. Uraon is one of the dominant populations amongst all tribes found in Surguja. The tribal’s are 55.4% of the total population. The total forest area in the region is 18,188.44 sq km which constitute 44% of the total area of the district. The tropical deciduous type of forest is found in Surguja district.

2. Materials and Methods
The survey was carried out by following Jain and Singh [1]. Interviewees were chosen without distinction of gender after seeking the consent from each respondent. People of Uraon tribe from all age groups, except children below 18 years were interviewed for their knowledge about the uses of plant in treatment of diabetes. The random sampling technique was used and a total of 300 questionnaires (30 in each village which included 15 male and 15 female) were filled during the survey. Information regarding the vernacular name, habit of the plant and plant parts used in drug preparation for treatment of diabetes was recorded. Informants were asked to name the plant and to reveal the uses of the respective species in treatment of diabetes.
Informants often accompanied with investigators collected the plant material from the field which is used in drug preparation. In cases of illiterate informants, photographs and fresh plant specimens from the field were presented to them and questionnaires were filled from their responses. Information was also recorded about the medicinal use of plant, plant parts used, diseases treated, modes of drug preparation and administration. The cost of treatment / episode was also noted. Friendly chats were also made with teenagers, youngsters and school children of both genders of tribal people. Participatory and group interaction approach was used for further cross check of data. Surveys were also made in the wilderness along altitudinal transects reaching timber line zones, surrounding natural habitats and the agricultural areas of villages. The help of local people was taken for the collection of plants growing in the area. Plant species were identified using Flora of Haines [2] and Hooke [3]. The gathered field information was analyzed to draw an ethnomedical use of plants by Uraon tribe of Surguja district in treatment of diabetes.

3. Results
Ethnobotanical survey was carried out in the 10 villages of Surguja district of Chhattisgarh. A total of 17 plant species belonging to 14 families were found to be effectively used for treating diarrhea by the tribal people of Surguja district (Table-1). Out 14 families 12 were found to belong dicotyledonous like Asclepiadaceae, Boraginaceae, Combretaceae, Ebenaceae, Euphorbiaceae, Fabaceae, Gentianaceae, Meliaceae, Menispermacae, Rhamnaceae, Rutaceae, Sterculiaceae and 01 family Zingiberaceae belong to monocotyledon 01 of Stilaginaceae. All the 17 plants and their parts were found to be used separately for the treatment of diarrhea. Whole plant for Phyllanthus simplex, Retz., Canscora diffusa, (Vahl) R.Br, Root for Abrus precatorius L., Helicteres isora, L., Ziziphus oenoplia, (L) Mill, Ziziphus nummularia, (Burm.f.) Wight & Arn, Rhizome for Zingiber cassumunar, Roxb., Curcuma aromatica, Salisb., Bark for Azadirachta indica, A.Juss, Cordia dichotoma, G.Forst, Aegle marmelos, L. Diospyros melanoxylon, Roxb., Tuber for Marsdenia tenacissima, Wight and Arn., Flower for Anogeissus latifolia, Roxb., Fruit for Antidesma bunius, (L.) Spreng Fruit, Emblica officinalis, Gaertn, Leaves for Cissampelos pareira, L. Aegle marmelos, plants were found to be used for drug preparation. The commonest method of drug preparation was noted as powder. Most of the drug was noticed to be taken by water. The method of drug preparation using 17 plants was documented.

3.1 Phyllanthus simplex, Retz. (Bhuiaonla):-
Whole plant is pounded with water to obtain decoction 1 teaspoon of decoction is taken 2-3 times a day for a period of 3 days to gives relief from diarrhea. The total cost of treatment is Rs 362/- episode.

3.2 Helicteres isora, L. (Attain):-
The roots of Helicteres isora are dried under sun light and one tea spoon powder are crushed and decoction is prepared. Half cup of decoction is taken thrice a day up to relief from diarrhea. The total cost of treatment is Rs 238/- episode.

3.3 Zingiber Casumunar, Roxb (Vansonthi):-
Small portion of rhizome is chewed only once to gives relief from diarrhea. The total cost of treatment is Rs 352/- episode.

3.4 Curcuma aromatic, Salisb, (Vanhaldi):-
Rhizome is grinded on a stone and two teaspoons of the paste is given for a period of 3 days to gives relief from diarrhea. The total cost of treatment is Rs 282/- episode.

3.5 Ziziphus oenoplia, (L) Mill (Makoi) and Abrus precatorius Linn. (Gumchi):-
The roots of Diospyros melanoxylon and Abrus precatorius are dried under sun light roots are pounded with water and half cup of decoction is taken twice daily for a period of 3 days to gives relief from diarrhea. The total cost of treatment is Rs 295/- episode.

3.6 Diospyros melanoxylon, Roxb. (Tendu):-
The roots of Diospyros melanoxylon are dried under sun light and one teaspoon of decoction prepared from pounded bark is taken twice a day up to 5-7 days to gives relief from diarrhea. The total cost of treatment is Rs 298/- episode.

3.7 Aegle marmelos, L. (Bel):-
Three teaspoons of decoction prepared from crushed bark and leaves is given daily for a period of 5-6 days to gives relief from diarrhea. The total cost of treatment is Rs 345/- episode.

3.8 Marsdenia tenacissima, Wight and Arn. (Chinhor):-
Tuber is pounded with water and 1 teaspoon of decoction prepared from pounded bark is taken daily with sugar up to three days to gives relief from diarrhea. The total cost of treatment is Rs 239/- episode.

3.9 Cordia dichotoma, G.Forst (Dahiman):-
15 grams of dried bark is grinded and the powder obtained is mixed with one glass of water. It is then strained through cloth and 1 teaspoon is thrice daily up to relief from diarrhea. The total cost of treatment is Rs 342/- episode.

3.10 Anogeissus latifolia, Roxb. (Dhawa):-
The dried flowers are grinded to powder. 1 teaspoon of powder is taken with one glass of water twice a day for 3-5 days to gives relief from diarrhea. The total cost of treatment is Rs 342/- episode.

3.11 Antidesma bunius, (L.) Spreng, (Amuri):-
The fruit is rubbed on a stone and one teaspoon of power obtained is taken with one teaspoon of honey trice a day up to 4 days to gives relief from diarrhea. The total cost of treatment is Rs 382/- episode.

3.12 Ziziphus numnulara, (Burm.f.) Wight & Arn. (Jharber):-
Roots are grinded and the paste obtained is mixed with grated rice to prepare bread. It is then eaten only once to gives relief from diarrhea. The total cost of treatment is Rs 338/- episode.

3.13 Canscora diffusa, (Vahl) R.Br. (Shank puli):-
Whole plant is pounded with water. It is then strained through cloth to obtain decoction. Half cup of this decoction is taken twice daily up to three days to gives relief from diarrhea. The total cost of treatment is Rs 325/- episode.

3.14 Emblica officinalis, Gaertn. (Aonla):-
Two to three teaspoons of juice extracted from fruits is taken daily for a period of 4 days to gives relief from diarrhea. The total cost of treatment is Rs 357/- episode.
3.15 *Cissampelos pareira*, L. (Phan):-
The leaves are grinded with water to obtain decoction. Half cup of the decoction is taken twice daily for a period of 3-4 days to gives relief from diarrhea. The total cost of treatment is Rs 235/- episode.

3.16 *Azadirachta indica*, A. Juss (Neem):-
One cup of grinded bark is put on 1 ½ glass of water to soak for half an hour. This is strained through cloth and taken daily for three days to gives relief from diarrhea. The total cost of treatment is Rs 342/- episode.

### Table 1: Plants used by Uraon tribe of Surguja district of Chhattisgarh for the treatment of Diarrhea

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Botanical name</th>
<th>Common name</th>
<th>Family</th>
<th>Habit of the plant</th>
<th>Plant part used for the treatment of Diarrhea</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td><em>Helicteres isora</em>, L.</td>
<td>Attain</td>
<td>Sterculiaceae</td>
<td>Shrub</td>
<td>Root</td>
</tr>
<tr>
<td>5.</td>
<td><em>Abras precatorius</em> L.</td>
<td>Gumchi</td>
<td>Fabaceae</td>
<td>Climber</td>
<td>Root</td>
</tr>
<tr>
<td>7.</td>
<td><em>Diospyros melanoxylon</em>, Roxb.</td>
<td>Tendu</td>
<td>Ebenaceae</td>
<td>Tree</td>
<td>Bark</td>
</tr>
<tr>
<td>8.</td>
<td><em>Aegle marmelos</em>, L.</td>
<td>Bel</td>
<td>Rutaceae</td>
<td>Tree</td>
<td>Bark/Leaves</td>
</tr>
<tr>
<td>10.</td>
<td><em>Cordia dichotoma</em>, G.Forst</td>
<td>Lasoda</td>
<td>Boraginaceae</td>
<td>Tree</td>
<td>Bark</td>
</tr>
<tr>
<td>16.</td>
<td><em>Cissampelos pareira</em>, L.</td>
<td>Phan</td>
<td>Menispermacaeae</td>
<td>Climber</td>
<td>Leaves</td>
</tr>
<tr>
<td>17.</td>
<td><em>Azadirachta indica</em>, A.Juss</td>
<td>Neem</td>
<td>Meliaceae</td>
<td>Tree</td>
<td>Bark</td>
</tr>
</tbody>
</table>

4. Discussion

The raw data received in the survey was tabulated and shown here as Tables 1. Table 1 represents botanical name, common name, family, habit of the plant. Plant part used for the treatment of diarrhea and the corresponding plant species in use to treat diarrhea symptoms. Uraon tribe is dominant in Surguja district Chhattisgarh. The study revealed that these tribes use about 17 plant species for the cure of diarrhea habit of these plants was observed as 7 trees, 4 herbs, 3 climbing and 3 shrubs. The present study indicated that Surguja region of Chhattisgarh is rich in biodiversity and people of Uraon tribe have rich knowledge of using plants and plant products for the treatment of diseases like diarrhea. The similar workers investigated by like Gupta [5], Johnsy [6], Wagh [8], Oguejiofor [7], Nijume [8], Appidi [9], Sen [10], Singh [11], Henry [12].

5. Conclusion


6. Acknowledgements

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